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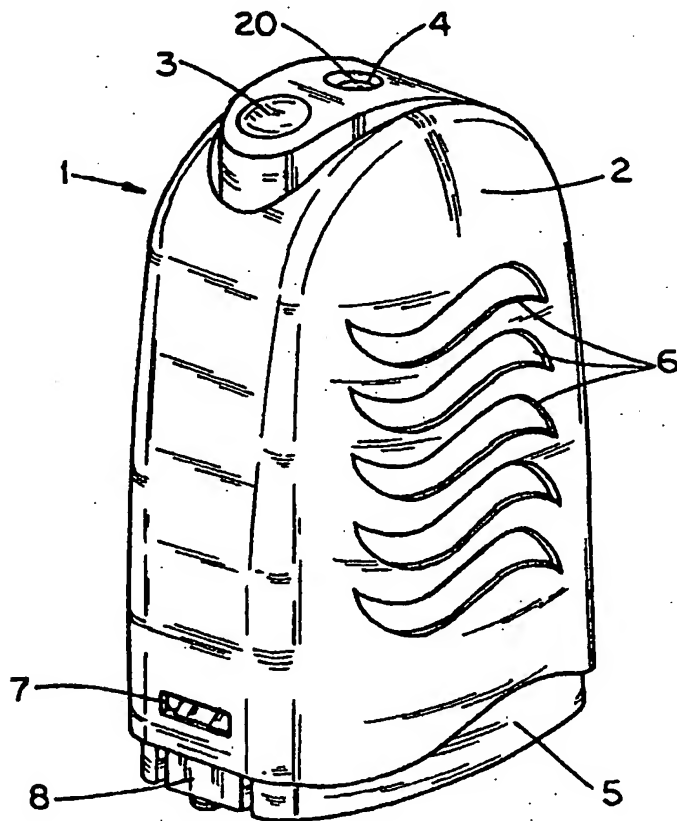
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(54) Title: DUAL FUNCTION DISPENSER



(57) Abstract: Dual functional dispensers (1), wherein the dispensers (1) comprise dispensing units independently capable of dispensing an actively dispersed spray or an evaporative long term dispersible material, comprise active dispensers in combination with passive dispensers (52) of volatile materials (40). The passive dispenser (52) may comprise the external shell (2) of said dual function dispenser (1), and may be fashioned of a porous ceramic, plastic, or paper material impregnated with an evaporative passively dispersible material (40) selected from the group consisting of fragrances, air fresheners, deodorizers, odor eliminators, malodor counteractants, insecticides, insect repellants, medicinal substances, disinfectants, sanitizers, mood enhancers, and aroma therapy compositions. The actively dispersed material may be the same or different. Refill units (11) for such dispensers may comprise a spray can (18) and associated control means (4), and an evaporative dispenser of dispersible material, provided either separately or as an integral unit.

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# INTERNATIONAL SEARCH REPORT

Intern. Appl. No.

PCT/US 00/21911

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 B65D83/14 A61L9/12

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 A61L B65D A63B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 3 972 473 A (HARRISON THOMAS S) 3 August 1976 (1976-08-03) cited in the application column 1, line 6 - line 65 column 2, line 67 - column 3, line 13; figures 1-6	1-19, 21-38
Y		20, 39
Y	US 5 567 073 A (DE LAFORCADE VINCENT ET AL) 22 October 1996 (1996-10-22) column 2, line 40 - line 53 column 3, line 32 - line 54; figure 1	20
A		1, 12, 18, 26
	-/-	

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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Date of the actual completion of the international search

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# INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 00/21911

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 4 084 732 A (DEARLING HARRY S) 18 April 1978 (1978-04-18) cited in the application column 1, line 8 - column 2, line 60; claim 1; figures 1-4	1,2, 8-10,26, 27,29-31
Y		39
A		12,37,38
X	US 4 341 348 A (DEARLING NEAL S) 27 July 1982 (1982-07-27)	1,2, 8-10,12, 13, 15-19, 21, 23-27, 29-31
A	column 1, line 13 - line 66; figures 1-3	3,37
X	DE 37 06 256 A (OREAL) 27 August 1987 (1987-08-27) column 3, line 12 - line 45; figures 1,2	40-42
A		44-46
X	EP 0 906 873 A (OREAL) 7 April 1999 (1999-04-07) column 1, line 3 - line 14 column 8, line 10 - line 55 column 10, line 24 - line 54; claims 1,2,30; figures 1-3	48,49
Y		50
Y	US 5 788 155 A (ROSPLOCK JOSEPH M ET AL) 4 August 1998 (1998-08-04) cited in the application column 1, line 10 - line 35; figures 1-5	50
A		1,12,26, 40,48,49
A	US 3 946 945 A (ODIOSO RAYMOND C ET AL) 30 March 1976 (1976-03-30) column 1, line 44 - line 64; figures 1,2	40,48
A	US 4 065 261 A (FUKADA ROKURO) 27 December 1977 (1977-12-27) claim 1; figure 9	51,52, 54-56
A	US 5 862 960 A (VAN LIT KLAAS JOHANNIS ET AL) 26 January 1999 (1999-01-26) abstract; figures 1-7	54,55

# INTERNATIONAL SEARCH REPORT

International application No.  
PCT/US 00/21911

## Box I Observations where certain claims were found unsearchable (Continuation of Item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:
  
2. ☐ Claims Nos.:  
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
  
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. ☒ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☒ No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. Claims: 1-50

dispenser for independently dispensable materials

2. Claims: 51-53

dual function multiple capacity dispenser comprising means to enhance vaporization

3. Claims: 54-56

dual function capacity dispenser with a shell adapted to hold the dispenser

# INTERNATIONAL SEARCH REPORT

information on patent family members

International Application No

PCT/US 00/21911

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 3972473 A	03-08-1976	NONE	
US 5567073 A	22-10-1996	FR 2713060 A CA 2136585 A,C CA 2218740 A DE 69419481 D DE 69419481 T EP 0655208 A EP 0875168 A ES 2133510 T	09-06-1995 30-05-1995 30-05-1995 19-08-1999 18-11-1999 31-05-1995 04-11-1998 16-09-1999
US 4084732 A	18-04-1978	NONE	
US 4341348 A	27-07-1982	NONE	
DE 3706256 A	27-08-1987	FR 2594714 A BE 1006756 A CH 671698 A ES 2003690 A IT 1207361 B	28-08-1987 06-12-1994 29-09-1989 01-11-1988 17-05-1989
EP 0906873 A	07-04-1999	FR 2769299 A CA 2245988 A CN 1213634 A JP 11165101 A US 6116466 A	09-04-1999 03-04-1999 14-04-1999 22-06-1999 12-09-2000
US 5788155 A	04-08-1998	AU 719319 B AU 3579397 A BR 9710078 A CA 2259296 A CN 1226177 A EP 0923386 A WO 9800179 A	04-05-2000 21-01-1998 10-08-1999 08-01-1998 18-08-1999 23-06-1999 08-01-1998
US 3946945 A	30-03-1976	CA 1038336 A	12-09-1978
US 4065261 A	27-12-1977	NONE	
US 5862960 A	26-01-1999	AU 726020 B AU 4166197 A BR 9714680 A CN 1247516 A EP 0981484 A PL 335388 A WO 9838114 A US 5875934 A	26-10-2000 18-09-1998 27-06-2000 15-03-2000 01-03-2000 25-04-2000 03-09-1998 02-03-1999